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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/918,401	07/30/2001	John P. Moyna	08-017	4664
58982 7590 06/25/2008 CATERPILLAR/FINNEGAN, HENDERSON, L.L.P. 901 New York Avenue, NW WASHINGTON, DC 20001-4413				
EXAMINER MCGOWAN, JAMIE LOUISE				
ART UNIT 3671		PAPER NUMBER		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

09/918,401

**Applicant(s)**

MOYNA, JOHN P.

**Examiner**

JAMIE L. MCGOWAN

**Art Unit**

3671

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 2, 4, 5, 7-9 and 41-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 5, 7-9 and 41-45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C)
- Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 4, 5, 7, 8 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayse (2,905,254) in view of Kinzenbaw et al. (5,346,019) and Gust (6,125,775).

Regarding claim 1, Hayse discloses an apparatus for separating soil comprising:

- A frame (7, 8, 9, 10, 11, 12) having a length defined between a first end of the frame (9) and a second end of the frame (10)
- An axle (17,66,67,68,69) connected to the frame between the first end of the frame (9) and the second end of the frame (10) wherein the axle has a length defined between a first end of the axle (17) and a second end of the axle
- Discs (3,4,5,6) attached to the frame on opposite sides of the axle (17) wherein at least one of the discs adjacent to the first side of the frame (9) is non-parallel with respect to at least one of the discs adjacent to the second side of the frame (10) wherein the discs are located between the frame and the soil and further wherein the discs rotate upon contact with the soil
- A controller (not shown but considered to be the controller that controls 76) associated with a cylinder (76) wherein the controller is remote with respect to the frame (operated remotely via cables 79 and 80) wherein the controller controls movement of the frame via the cylinder (76) wherein the discs are moved with the frame

While Hayse discloses the invention as described above, it fails to disclose a piston and cylinder assembly including a cylinder connected to the frame and a movable piston rod connected to the axle and a pillar connected to the frame and a column inside the pillar and extending to the axle. Like Hayse, Kinzenbaw et al. also discloses a work implement that raises and lowers the frame for transport. Unlike Hayse, Kinzenbaw et al. further discloses a pillar (118) and a column (100b) inside the pillar (118), a liner (180b) (claim 4) inside the pillar and plates (182b) inside the pillar and supporting the column and retain the liner (claim 5) of the lifting mechanism. Kinzenbaw et al. teaches that his lifting mechanism (the pillar and column along with hydraulic cylinder (108) which is connected at the cylinder to the frame and at the rod near the axle) is desirable because it allows the operator to rotate the frame about a vertical axis for transport on a road. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the lifting mechanism (pillar, column and hydraulic cylinder) of Kinzenbaw et al. in the implement of Hayse to make transport of the frame easier by allowing the operator to transport the frame on narrow roads.

While the combination of Hayse and Kinzenbaw et al. discloses the invention as described above, it fails to specifically disclose that the rod and the pillar/column are attached at the axle. Like the combination of Hayse and Kinzenbaw et al., Gust also discloses a frame with a transport position. Unlike the combination of Hayse and Kinzenbaw et al., Gust further discloses that it is known in the art to attach the rod end of a hydraulic cylinder (54) on the wheel axle for moving the frame into a transport position. It would have been obvious to one of ordinary skill in the art at the time the invention was made to attach the column/pillar and hydraulic cylinder at the wheel axle in the combination of Hayse and Kinzenbaw et al. as taught by Gust so that the weight of the frame and implement is supported directly by the ground support so as to reduce strain on the machine when in the transport position.

Regarding claim 2, the combination of Hayse, Kinzenbaw et al. and Gust discloses a a hitch assembly having a length and a connector of the hitch wherein the end of the hitch is attached to the frame and a second hydraulic piston/cylinder (76) connected between the hitch and the frame and configured to pivot the frame with respect to the axle.

Regarding claim 7, the combination of Hayse, Kinzenbaw et al. and Gust discloses that the connector (72) rotates in a first direction and a second direction wherein the first direction is opposite to the second direction (the fact that the connector is attached to the frame with a rockshaft allows the connector to rotate about the rockshaft in opposite directions).

Regarding claim 8, the combination of Hayse, Kinzenbaw et al. and Gust discloses that there are wheels (70,71) connected to the axle, wherein the wheel supports the frame.

Regarding claim 44, the combination of Hayse, Kinzenbaw et al. and Gust discloses that the controller controls both hydraulic cylinders.

3. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hayse (2,905,254) in view of Kinzenbaw et al. (5,346,019) and Gust (6,125,775) as applied to claims 1 and 8 above and further in view of Fruth (3,331,638).

While the combination of Hayse, Kinzenbaw et al. and Gust discloses the device above, it fails to disclose a plug in the wheel of the frame. Like the combination of Hayse, Kinzenbaw et al. and Gust, Fruth also discloses a wheel. Unlike the combination, Fruth further discloses a plug in the wheel for an oil bath to keep the wheel and bearings lubricated. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include an oil bath and plug in the wheel of combination as taught by Fruth to keep the bearings and the wheel well lubricated to prevent damage to any of the parts.

4. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hayse (2,905,254) in view of Kinzenbaw et al. (5,346,019) and Gust (6,125,775) as applied to claims 1 and 8 above and further in view of Official Notice.

The combination of Hayse, Kinzenbaw et al. and Gust discloses the claimed invention except for specifically disclosing that the liner could be plastic. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to use plastic, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In *re* Leshin, 125 USPQ 416. It is also common knowledge to choose a material that has sufficient strength, durability, flexibility, hardness, etc. for the application and intended use of that material.

5. Claims 42 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayse (2,905,254) in view of Kinzenbaw et al. (5,346,019) and Gust (6,125,775) as applied to claims 1 and 8 above and further in view of Official Notice.

While the combination of Hayse, Kinzenbaw et al. and Gust does not specifically disclose the use of multiple pillars, it would have been obvious to one having ordinary skill in the art at the time the invention was made, to use a plurality of pillars, as it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. See also, MPEP § 2144.05 which states: *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960). In this particular case, the use of an additional pillar would be beneficial because it would help spread the weight of the frame across two points thereby lessening the strain on the first pillar and allowing the frame to be larger by adding an extra support.

Regarding claim 43, the combination of Hayse, Kinzenbaw et al. and Gust discloses a bar (Kinzenbaw - 24) extending between the pillars wherein the cylinder of the piston and cylinder assembly is connected to the bar (through elements 110 and 114).

6. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hayse (2,905,254) in view of Kinzenbaw et al. (5,346,019) and Gust (6,125,775) as applied to claims 1 and 8 above and further in view of King (3,430,366).

While the combination of Hayse, Kinzenbaw et al. and Gust discloses the device as described above it fails to specifically disclose that the hitch cylinder automatically adjusts to changes in the contour of the ground. Like the combination, King also discloses a hitch cylinder for a towed implement. Unlike the combination, King further discloses a cylinder that connects the frame and the hitch that automatically adjusts to changes in the ground contour. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the hitch cylinder of the combination of Hayse, Kinzenbaw et al. and Gust adjust automatically to the ground contour as taught by King to ensure even working of the field with the discs.

### ***Response to Arguments***

7. Applicant's arguments with respect to claims 1-9 and 41-45 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMIE L. MCGOWAN whose telephone number is (571)272-5064. The examiner can normally be reached on Monday through Friday 8:00 AM to 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will can be reached on (571)272-6998. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thomas B Will/  
Supervisory Patent Examiner  
Art Unit 3671

JLM  
June 20, 2008